

SEQUENCE LISTING

<110> Ford, Gregory
Bloom, Debra
Fathman, C. Garrison

<120> Anergy Associated Genes

<130> STAN177

<140> Unassigned

<141> 2001-05-11

<150> 60/203,513

<151> 2000-05-11

<160> 8

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 239

<212> DNA

<213> Mus musculus

<400> 1

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| ttgagtttag | ccccaaatac | tacaaaaaag | aggccaagt | ttaaatgta | ctctcctaac | 60 |
| aactgtcaaa | tcaatttcta | gcctctaaat | cttgctactt | ccactccaca | aagtcacata | 120 |
| agagagaagc | tgatggaaat | ttttgagtcc | cattcattag | ataattgaca | tactcagttt | 180 |
| ccttttgaac | acagtccttg | gtaataggaa | tcatacagaa | atcttttatt | tctggaaaa | 239 |

<210> 2

<211> 260

<212> DNA

<213> Mus musculus

<400> 2

| | | | | | | |
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| ggattttggc | tccggggcat | cctggattta | gaaaacggac | agcacacagt | acagtgggtat | 60 |
| aaacttttta | ttatcagttc | aaaatcagtt | tgttggttcag | aagaaagatt | gctaattgtat | 120 |
| gatgggaagt | gtttggccat | gcttgcttgt | tggcagttaa | gacaaatgta | acacacacac | 180 |
| acacacacac | acacacacac | acacatgaga | tgagtcactg | ccttctatgg | ccttctatgg | 240 |
| tgtacgacag | ttagagatgc | | | | | 260 |

<210> 3

<211> 500

<212> DNA

<213> Mus musculus

<400> 3

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| cccagcaaga | cctcagccat | gagacttctc | ctcctgactt | tcctgggagt | ctgctgcctc | 60 |
| accccatggg | ttgtggaagg | tgtggggact | gaagtcctag | aagagagtag | ctgtgtgaac | 120 |
| ttacaaaccc | agcggctgcc | agttcaaaaa | atcaagacct | atatcatctg | ggagggggcc | 180 |
| atgagagctg | taatttttgt | caccaaacga | ggactaaaaa | tttgtgctga | tccagaaccc | 240 |
| aaatgggtga | aagcagcgat | caagactgtg | gatggcaggg | ccagtaccag | aaagaacatg | 300 |
| gctgaaactg | ttcccacagg | agcccagagg | tccaccagca | cagcagtaac | cctgactggg | 360 |
| taacagcctc | caggacaatg | tttctcact | cgtaagcag | ctcatctcag | ttcccaaacc | 420 |

cattgcacaa atacttattt ttatttttaa cgacattcac attcatttca aatgttataa 480
gtaataaata tttattattg 500

<210> 4
<211> 264
<212> DNA
<213> Mus musculus

<400> 4
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tcaaactaat gcagaaagaa aaaggaaaat gtgtgtggtt ttgtcttcac tactgagtct 120
tttctttggg aaccatcact gttgagaggt gggggaaaac ctgaatgtaa aaagcattta 180
tttgtcaata aactgccttt tgtaaaaaaa agccctatag tgagtcgtat tacaagccga 240
ttctgcgaaa ttccatcaca ctaa 264

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<212> DNA
<213> Mus musculus

<220>
<221> CDS
<222> (358)...(1641)

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cccgggtgga aaatcgatgg gcccgcgggc gctctagaag tactctcgag aagctttttg 180
aattcggcac gagcgcttgc ttgcaggagc tgcgtctgca gtacgctggc cgctgacgct 240
gcgtgccggc tggcagggca gcctgcgacc tcgctggccc cgcgccgct gctagccgcc 300
ggctccccac ctggttcgca cctagtccca gcccgggctg cctgccgagt gcgcgcc atg 360
Met
1

ggg ccg ccg ccc ggg atc ggg gtc tac tgc cgc ggc ggc tgc gga gct 408
Gly Pro Pro Pro Gly Ile Gly Val Tyr Cys Arg Gly Gly Cys Gly Ala
5 10 15

gcc cgg cta ctg gct tgg tgc ttc ctt ctg gct ctg agt ccg cac gcg 456
Ala Arg Leu Leu Ala Trp Cys Phe Leu Leu Ala Leu Ser Pro His Ala
20 25 30

ccc ggt tcc cgg gga gcc gaa gcc gtg tgg act gcg tac ctc aac gtg 504
Pro Gly Ser Arg Gly Ala Glu Ala Val Trp Thr Ala Tyr Leu Asn Val
35 40 45

tcc tgg cgg gtt ccg cac acc gga gtg acc gca cgg tgt gga gct gag 552
Ser Trp Arg Val Pro His Thr Gly Val Thr Ala Arg Cys Gly Ala Glu
50 55 60 65

cga gag gcc gtg tac gcc cag gac tcg ccg ctg aag ccc gtc tcc ggg 600
Arg Glu Gly Val Tyr Gly Gln Asp Ser Pro Leu Lys Pro Val Ser Gly
70 75 80

gtc ctg gta ccg ccc gac ggg ccc ggg gcg ctc aac gcc tgt aac ccg 648
Val Leu Val Pro Pro Asp Gly Pro Gly Ala Leu Asn Ala Cys Asn Pro
85 90 95

| | |
|---|------|
| cac acc aat ttc acg gtg ccc acg gtt tgg ggg agc acg gtg caa gta His Thr Asn Phe Thr Val Pro Thr Val Trp Gly Ser Thr Val Gln Val 100 105 110 | 696 |
| tct tgg ttg gcc ctc atc caa cgc ggt gga ggc tgc acc ttc gcg gac Ser Trp Leu Ala Leu Ile Gln Arg Gly Gly Gly Cys Thr Phe Ala Asp 115 120 125 | 744 |
| aag atc cat ctg gct tca gag aga ggg gct tct gga gcg gtc atc ttt Lys Ile His Leu Ala Ser Glu Arg Gly Ala Ser Gly Ala Val Ile Phe 130 135 140 145 | 792 |
| aac ttc cct ggg acc cgc aat gag gtc atc ccc atg tct cac ccg ggt Asn Phe Pro Gly Thr Arg Asn Glu Val Ile Pro Met Ser His Pro Gly 150 155 160 | 840 |
| gct ggg gac att gtt gca atc atg att ggc aat ctg aaa gga aca aaa Ala Gly Asp Ile Val Ala Ile Met Ile Gly Asn Leu Lys Gly Thr Lys 165 170 175 | 888 |
| att ctg cag tct att caa aga ggc atc caa gtc aca atg gtc atc gaa Ile Leu Gln Ser Ile Gln Arg Gly Ile Gln Val Thr Met Val Ile Glu 180 185 190 | 936 |
| gta ggg aaa aaa cat ggc cct tgg gtg aat cat tat tca att ttc ttc Val Gly Lys Lys His Gly Pro Trp Val Asn His Tyr Ser Ile Phe Phe 195 200 205 | 984 |
| gtt tct gtg tcc ttt ttc ata att acg gca gca acc gtg ggc tat ttc Val Ser Val Ser Phe Phe Ile Ile Thr Ala Ala Thr Val Gly Tyr Phe 210 215 220 225 | 1032 |
| atc ttt tat tct gct cga aga tta cga aat gca aga gct caa agc agg Ile Phe Tyr Ser Ala Arg Arg Leu Arg Asn Ala Arg Ala Gln Ser Arg 230 235 240 | 1080 |
| aag cag agg cag tta aag gca gat gct aaa aaa gct att gga aag ctt Lys Gln Arg Gln Leu Lys Ala Asp Ala Lys Lys Ala Ile Gly Lys Leu 245 250 255 | 1128 |
| cag ctg cgc acc ttg aaa caa gga gac aag gaa att ggc cct gat gga Gln Leu Arg Thr Leu Lys Gln Gly Asp Lys Glu Ile Gly Pro Asp Gly 260 265 270 | 1176 |
| gat agc tgt gct gtg tgc att gag ctc tat aag cca aat gat ttg gtg Asp Ser Cys Ala Val Cys Ile Glu Leu Tyr Lys Pro Asn Asp Leu Val 275 280 285 | 1224 |
| cgc atc cta acc tgc aat cat att ttc cat aag aca tgt gtg gac ccg Arg Ile Leu Thr Cys Asn His Ile Phe His Lys Thr Cys Val Asp Pro 290 295 300 305 | 1272 |
| tgg ctt tta gaa cac agg act tgc ccc atg tgc aag tgt gac att ctc Trp Leu Leu Glu His Arg Thr Cys Pro Met Cys Lys Cys Asp Ile Leu 310 315 320 | 1320 |
| aaa gct ctg gga att gag gtg gat gtt gaa gat gga tca gtg tct tta Lys Ala Leu Gly Ile Glu Val Asp Val Glu Asp Gly Ser Val Ser Leu | 1368 |

| 325 | 330 | 335 | |
|---|-----|-----|------|
| caa gtt cct gtt tct aat gaa gca tct aat act gcc tct ccc cat gaa | | | 1416 |
| Gln Val Pro Val Ser Asn Glu Ala Ser Asn Thr Ala Ser Pro His Glu | | | |
| 340 | 345 | 350 | |
| gag gac agt cgc agt gag act gca tca tct gga tat gct tca gta caa | | | 1464 |
| Glu Asp Ser Arg Ser Glu Thr Ala Ser Ser Gly Tyr Ala Ser Val Gln | | | |
| 355 | 360 | 365 | |
| gga gca gat gag cca cct ctg gag gaa cat gcg cag tca gca aat gaa | | | 1512 |
| Gly Ala Asp Glu Pro Pro Leu Glu Glu His Ala Gln Ser Ala Asn Glu | | | |
| 370 | 375 | 380 | 385 |
| aat cta cag ctg gta aac cat gaa gca aat tct gtg gcc gtg gat gtt | | | 1560 |
| Asn Leu Gln Leu Val Asn His Glu Ala Asn Ser Val Ala Val Asp Val | | | |
| 390 | 395 | 400 | |
| gtt ccc cat gtt gac aac cca acc ttt gaa gaa gat gaa act cct gat | | | 1608 |
| Val Pro His Val Asp Asn Pro Thr Phe Glu Glu Asp Glu Thr Pro Asp | | | |
| 405 | 410 | 415 | |
| caa gag gca gct gtt cgg gag att aaa tct taa aaatctgtgt caatagaaaa | | | 1661 |
| Gln Glu Ala Ala Val Arg Glu Ile Lys Ser * | | | |
| 420 | 425 | | |
| cttgaaccgt tagttaacaa caggactgcc aatcagggcc tagtttacta tgaatgaact | | | 1721 |
| gggtaaacgt aaaacaagaa tgatactgaa agtgctgagg taacttatat tatactatag | | | 1781 |
| ttaaattggct taacatatatt accccagtag cgttttccac aaactcacca taacgttttt | | | 1841 |
| cataggcaag tttcctcttg gtgatatgta tagcaacatt tttaacattc agaaccgtct | | | 1901 |
| atgagtagtc aggttttttca tttacaacaa ctttggttata aaaaaatatg ttgcttttaa | | | 1961 |
| agtgtggagt agctgtaatc actttgtttt atgatagtat cataattaaa caatactact | | | 2021 |
| acttttagctt gggctctgtg tgtcgggggtt tgtctccagg tgcttatatt gatctggaat | | | 2081 |
| ttgtttaaaa aaactcgtgc cgaattcttt ggatccacta gtgtcgacct gcaggcgcgcg | | | 2141 |
| gagc | | | 2145 |
| <210> 6 | | | |
| <211> 427 | | | |
| <212> PRT | | | |
| <213> Mus musculus | | | |
| <400> 6 | | | |
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| Ala Ala Arg Leu Leu Ala Trp Cys Phe Leu Leu Ala Leu Ser Pro His | | | |
| 20 25 30 | | | |
| Ala Pro Gly Ser Arg Gly Ala Glu Ala Val Trp Thr Ala Tyr Leu Asn | | | |
| 35 40 45 | | | |
| Val Ser Trp Arg Val Pro His Thr Gly Val Thr Ala Arg Cys Gly Ala | | | |
| 50 55 60 | | | |
| Glu Arg Glu Gly Val Tyr Gly Gln Asp Ser Pro Leu Lys Pro Val Ser | | | |
| 65 70 75 80 | | | |
| Gly Val Leu Val Pro Pro Asp Gly Pro Gly Ala Leu Asn Ala Cys Asn | | | |
| 85 90 95 | | | |
| Pro His Thr Asn Phe Thr Val Pro Thr Val Trp Gly Ser Thr Val Gln | | | |
| 100 105 110 | | | |
| Val Ser Trp Leu Ala Leu Ile Gln Arg Gly Gly Gly Cys Thr Phe Ala | | | |
| 115 120 125 | | | |

Asp Lys Ile His Leu Ala Ser Glu Arg Gly Ala Ser Gly Ala Val Ile
 130 135 140
 Phe Asn Phe Pro Gly Thr Arg Asn Glu Val Ile Pro Met Ser His Pro
 145 150 155 160
 Gly Ala Gly Asp Ile Val Ala Ile Met Ile Gly Asn Leu Lys Gly Thr
 165 170 175
 Lys Ile Leu Gln Ser Ile Gln Arg Gly Ile Gln Val Thr Met Val Ile
 180 185 190
 Glu Val Gly Lys Lys His Gly Pro Trp Val Asn His Tyr Ser Ile Phe
 195 200 205
 Phe Val Ser Val Ser Phe Phe Ile Ile Thr Ala Ala Thr Val Gly Tyr
 210 215 220
 Phe Ile Phe Tyr Ser Ala Arg Arg Leu Arg Asn Ala Arg Ala Gln Ser
 225 230 235 240
 Arg Lys Gln Arg Gln Leu Lys Ala Asp Ala Lys Lys Ala Ile Gly Lys
 245 250 255
 Leu Gln Leu Arg Thr Leu Lys Gln Gly Asp Lys Glu Ile Gly Pro Asp
 260 265 270
 Gly Asp Ser Cys Ala Val Cys Ile Glu Leu Tyr Lys Pro Asn Asp Leu
 275 280 285
 Val Arg Ile Leu Thr Cys Asn His Ile Phe His Lys Thr Cys Val Asp
 290 295 300
 Pro Trp Leu Leu Glu His Arg Thr Cys Pro Met Cys Lys Cys Asp Ile
 305 310 315 320
 Leu Lys Ala Leu Gly Ile Glu Val Asp Val Glu Asp Gly Ser Val Ser
 325 330 335
 Leu Gln Val Pro Val Ser Asn Glu Ala Ser Asn Thr Ala Ser Pro His
 340 345 350
 Glu Glu Asp Ser Arg Ser Glu Thr Ala Ser Ser Gly Tyr Ala Ser Val
 355 360 365
 Gln Gly Ala Asp Glu Pro Pro Leu Glu Glu His Ala Gln Ser Ala Asn
 370 375 380
 Glu Asn Leu Gln Leu Val Asn His Glu Ala Asn Ser Val Ala Val Asp
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 Val Val Pro His Val Asp Asn Pro Thr Phe Glu Glu Asp Glu Thr Pro
 405 410 415
 Asp Gln Glu Ala Ala Val Arg Glu Ile Lys Ser
 420 425

<210> 7
 <211> 1774
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (263)...(1547)

<221> misc_feature
 <222> (1)...(1774)
 <223> n = A,T,C or G

<400> 7
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 aattcggcac gagccgagga gctgcacatg cggaacctg tgtgctgacg ctacgtgcct 120
 cctggctccg acgtagctcg cagctcccca gtctcactcc attccttccc cacctggcgc 180
 gcacctgctc aagaccaggg tccgtgccaag cgctaggagg gcgcgtgcca ggggcgctag 240
 ggaactgcgg agcgcgcgcg cc atg ggg ccg cct ggg gcc ggg gtc tcc 292

| Met | Gly | Pro | Pro | Pro | Gly | Ala | Gly | Val | Ser | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | | | | 5 | | | | | 10 | | | | | | | |
| tgc | cgc | ggt | ggc | tgc | ggc | ttt | tcc | aga | ttg | ctg | gca | tgg | tgc | ttc | ctg | 340 |
| Cys | Arg | Gly | Gly | Cys | Gly | Phe | Ser | Arg | Leu | Leu | Ala | Trp | Cys | Phe | Leu | |
| | | | 15 | | | | | | 20 | | | | | 25 | | |
| ctg | gcc | ctg | agt | ccg | cag | gca | ccc | ggt | tcc | cgg | ggg | gct | gaa | gca | gtg | 388 |
| Leu | Ala | Leu | Ser | Pro | Gln | Ala | Pro | Gly | Ser | Arg | Gly | Ala | Glu | Ala | Val | |
| | | | 30 | | | | | 35 | | | | | 40 | | | |
| tgg | acc | gcg | tac | ctc | aac | gtg | tcc | tgg | cgg | ggt | ccg | cac | acg | gga | gtg | 436 |
| Trp | Thr | | Tyr | Leu | Asn | Val | Ser | Trp | Arg | Val | Pro | His | Thr | Gly | Val | |
| | | 45 | | | | | 50 | | | | | 55 | | | | |
| aac | cgt | acg | gtg | tgg | gag | ctg | agc | gag | gag | ggc | gtg | tac | ggc | cag | gac | 484 |
| Asn | Arg | Thr | Val | Trp | Glu | Leu | Ser | Glu | Glu | Gly | Val | Tyr | Gly | Gln | Asp | |
| | 60 | | | | | 65 | | | | 70 | | | | | | |
| tcg | ccg | ctg | gag | cct | gtg | gct | ggg | gtc | ctg | gta | ccg | ccc | gac | ggg | ccc | 532 |
| Ser | Pro | Leu | Glu | Pro | Val | Ala | Gly | Val | Leu | Val | Pro | Pro | Asp | Gly | Pro | |
| | 75 | | | | 80 | | | | | 85 | | | | | 90 | |
| ggg | gcg | ctt | aac | gcc | tgt | aac | ccg | cac | acg | aat | ttc | acg | gtg | ccc | acg | 580 |
| Gly | Ala | Leu | Asn | Ala | Cys | Asn | Pro | His | Thr | Asn | Phe | Thr | Val | Pro | Thr | |
| | | | 95 | | | | | | 100 | | | | | 105 | | |
| gtt | tgg | gga | agc | acc | gtg | caa | gtc | tct | tgg | ttg | gcc | ctc | atc | caa | cgc | 628 |
| Val | Trp | Gly | Ser | Thr | Val | Gln | Val | Ser | Trp | Leu | Ala | Leu | Ile | Gln | Arg | |
| | | | 110 | | | | | 115 | | | | | 120 | | | |
| ggc | ggg | ggc | tgc | acc | ttc | gca | gac | aag | atc | cat | ctg | gct | tat | gag | aga | 676 |
| Gly | Gly | Gly | Cys | Thr | Phe | Ala | Asp | Lys | Ile | His | Leu | Ala | Tyr | Glu | Arg | |
| | | 125 | | | | | 130 | | | | | 135 | | | | |
| tgg | gcg | tct | gga | gcc | gtc | atc | ttt | aac | ttc | ccc | ggg | acc | cgc | aat | gag | 724 |
| Trp | Ala | Ser | Gly | Ala | Val | Ile | Phe | Asn | Phe | Pro | Gly | Thr | Arg | Asn | Glu | |
| | 140 | | | | | 145 | | | | | 150 | | | | | |
| gtc | atc | ccc | atg | tct | cac | ccg | ggt | gca | gta | gac | att | gtt | gca | atc | atg | 772 |
| Val | Ile | Pro | Met | Ser | His | Pro | Gly | Ala | Val | Asp | Ile | Val | Ala | Ile | Met | |
| | 155 | | | | 160 | | | | | 165 | | | | | 170 | |
| atc | ggc | aat | ctg | aaa | ggc | aca | aaa | att | ctg | caa | tct | att | caa | aga | ggc | 820 |
| Ile | Gly | Asn | Leu | Lys | Gly | Thr | Lys | Ile | Leu | Gln | Ser | Ile | Gln | Arg | Gly | |
| | | | 175 | | | | | | 180 | | | | | 185 | | |
| ata | caa | gtg | aca | atg | gtc | ata | gaa | gta | ggg | aaa | aaa | cat | ggc | cct | tgg | 868 |
| Ile | Gln | Val | Thr | Met | Val | Ile | Glu | Val | Gly | Lys | Lys | His | Gly | Pro | Trp | |
| | | | 190 | | | | | 195 | | | | | 200 | | | |
| gtg | aat | cac | tat | tca | att | ttt | ttc | gtt | tct | gtg | tcc | ttt | ttt | att | att | 916 |
| Val | Asn | His | Tyr | Ser | Ile | Phe | Phe | Val | Ser | Val | Ser | Phe | Phe | Ile | Ile | |
| | | 205 | | | | | 210 | | | | | 215 | | | | |
| acg | gcg | gca | act | gtg | ggc | tat | ttt | atc | ttt | tat | tct | gct | cga | agg | cta | 964 |
| Thr | Ala | Ala | Thr | Val | Gly | Tyr | Phe | Ile | Phe | Tyr | Ser | Ala | Arg | Arg | Leu | |
| | 220 | | | | | 225 | | | | | 230 | | | | | |

[illegible]

8

420

425

1. The first part of the document is a list of names and their corresponding addresses. The names are listed in the first column, and the addresses are listed in the second column. The names are: John Doe, Jane Smith, and Bob Johnson. The addresses are: 123 Main St, 456 Elm St, and 789 Oak St.